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THIS new word which has been sprung so tremendously on the American public in recent days expresses so far two meanings:

First of all it expresses the group of men working under the direction of Howard Scott and said to be evolving charts and diagrams showing certain trends of civilization. So far not one of these charts has been published.

Secondly, Technocracy may be said to represent a system or rather the overthrow of a system and again so far, although the overflow of our existing system has been advocated, there has been little proposal of a new system to take its place.

Now let us analyze Technocracy under these two heads and let us take first the personnel. The group have been designated as engineers, but it is very doubtful if they may be called so. Howard Scott calls himself an engineer, but it is a self-given classification, for on analysis it is found that he has had no engineering training and has never had charge of engineering projects. Quoting from the magazine "Time," it is said that quite on the contrary he has been a workman and an incompetent one at that. Nor is his group trained in modern industrial engineering methods, with one exception and that a very strong one, namely, Dr. Walter Rautenstrauch of the department of industrial engineering at Columbia University is said to be one of the members of Technocracy. The majority of the group are architects out of work and now delving into a field in which they have had no experience.

Now let us analyze their statements and let us take a little mathematical analogy first to show the methods used.

Suppose one good hen will lay one egg in one day then it is logical to assume that 21 hens will lay 21 eggs in one day. Now suppose one hen hatches an egg in 21 days, will 21 hens hatch the same egg in one day. The question is ridiculous from the common sense point of view; we know then that mathematical reasoning becomes fallacious because the habits of the hen and its characteristics enter into the picture. We know that because we have an understanding of hen life, but suppose we did not have our knowledge, would we not think the problem a perfectly logical one.

Technocracy has been banking on our ignorance and has carefully selected such mediums of expression as the non-technical magazines such as the Outlook, Living Age, Harpers and Cosmopolitan which do not go except incidentally to the technical man. Technocracy has deliberately ignored expressing itself in engineering circles where its fallacies and truths could be analyzed and criticized and affirmed or denied.

I have said there are some truths in the statements of Technocracy. There are but they are often exaggerated. One of the statements is that we are displacing men by machines. We unquestionably are but we should pause to analyze what kind of men. Intelligent men are rarely displaced by machines for such men are rarely machine tool operators. Displacement of men by machines is no new thing; it has been going on since Archimedes invented the water power engine to open the temple gates without man power some 2000 or so years ago. It reached a dramatic point when Arkwright invented his spinning machine and then during the world war and slightly after it reached a climax. The lower type of craftsman was displaced into the ranks of the unemployed, the higher type took on the business of designing the machine tool or equipment and so it is today. The intelligent man has little or nothing to fear from technological processes. It is the unintelligent man who has all to fear. The statement is made that in an automobile frame manufacturer's plant in Milwaukee, the plant of the A. O. Smith Co., there are some 240 operators at work. This may seem at first glance that this number represents the total force, but it certainly does not, as there are several hundred intelligent engineers designing the machinery, setting up the machinery, and maintaining the equipment. There is also a considerable force engaged in research work of a high order.

Now let us analyze their statement that the automotive manufacturing industry reached its peak of employment in 1923. Let us ask first what is the automotive industry. Does it consist purely of the manufacturers of automobiles, or is it something greater. Does it not consist of all the

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industries dependent on automobiles and when we analyze this factor we find an astounding situation.

First of all there are the retail outlets, the sales agencies of cars which have grown considerably. Then there are the accessory manufacturers, such as tires, lamps, heaters, replacement parts and what not. Then there are the 100,000 filling stations which cater to the automobile. We can also say that our tremendous highway program is part of our automotive system including builders of highway bridges and the maintenance thereof. Even the little hot dog stand along the highway owes its existence to the great automotive industry. True there are some 1,000,000 men out of work in this great broad industry, but there are some 4,000,000 men still at work, all of whom owe their livelihood to the low cost system of transportation created by a machine age. Think where we would have been as regards employment if we did not have the machine made cheap automobile.

And what is true of the car is true of the iceless refrigerator, the vacuum cleaner, the electric washing machine, the radio and so on. All products of the machine age have contributed greatly to employment.

Now let us analyze the razor blade story, namely, that a razor blade can now be made to last indefinitely, and let me ask you if we did not have such a one in the old fashioned razor of many years ago. It lasted forever but it was displaced by newer styles of blades which were found superior. We don't want a lasting blade, we want a superior quality blade which will cut smoothly and freely and that we have not yet got. The blade suggested by the Technocrats might last forever but it would be of little value, as it soon would be obsolete by a better product coming along. It would seem therefore that Technocracy has forgotten the factor of style. As an analogy we might take the case of a lady's hat which can be made to last forever, but what woman in her sober senses would want to wear it.

In conclusion let me quote from the Resolution on Technocracy adopted by the Assembly of American Engineering Council, January 14, 1933: "The alleged unmanagability of a machine economy has not been proven. Its dislocations are traceable to improper and unskilled use rather than to inherently harmful characteristics. Complete replacement of men by the machine is precluded by the law of diminishing returns. Instances are increasingly in evidence. Contrary to the pronouncements of Technocracy, applied science holds the promise of better things to come in a society which fearlessly and intelligently meets its problems. It is the considered opinion of American Engineering Council that our present economic structure contains within itself the possibilities of progressive improvement and of the attainment of higher standards of living."